#### Prairie Ecosystems

What are they and why do we care?

Gary Olson
MT FWP

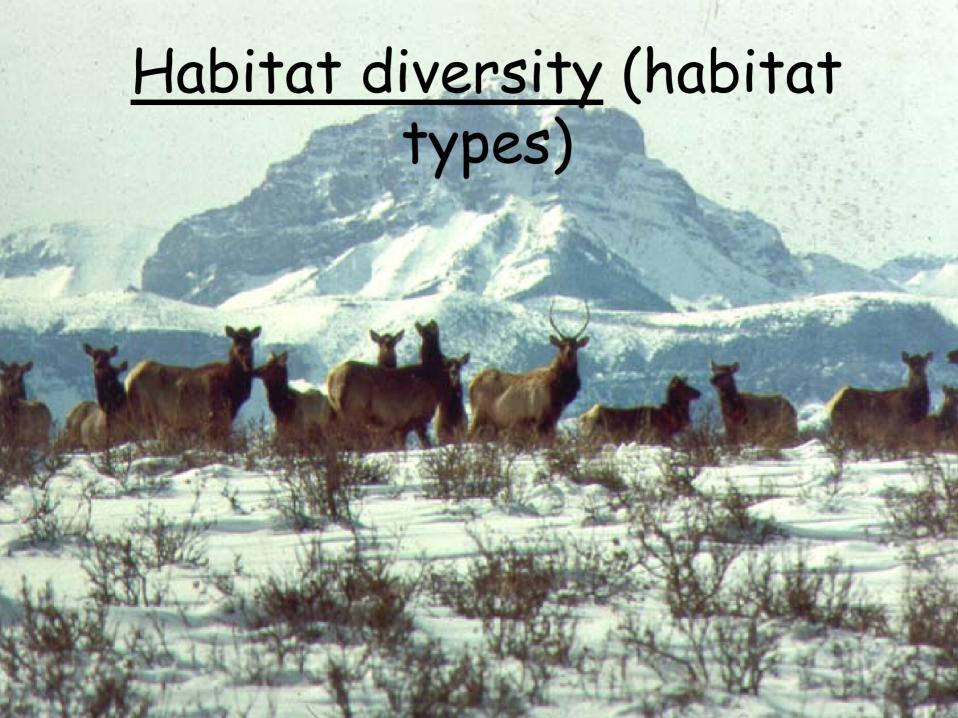
## What's a prairie (grassland) ecosystem?

- Generally considered dry, unattractive and non-productive
- Wind-blown, cold in the winter, hot in the summer
- · "miles from anywhere"
- Rarely wet, but when it is, a "gumbo mess"
- Full of badger holes, prairie dogs and gophers
- Jackrabbits need to pack their lunch
- Every plant and animal has an equal opportunity to bite, sting or barb you

# Actually... a complex natural system generally dominated by grasses that is:

- <u>Diverse</u> species, topography,
   climate, precip patterns
- <u>Productive</u> soils, lbs/acre, #'s of fauna
- <u>Pyramic</u> constantly changing in response to ppt, succession, fire, mgt, competition
- •Collection of specially adapted plants to extreme environmental conditions
- "the American Serengeti"





#### What's out there?

- Stream bottoms
  - · Coulees
  - · Wet meadows
  - Benches and plateaus
  - · Foothills
- · Grassland savannahs

#### Topographic Diversity

- different habitat types blend together
  - · enhances species richness
  - increases total numbers of plant species
  - maximizes grass, forb and shrub communities
  - · allows for wildlife use of "edges"

#### Grizzly Bear

- Classic prairie-user: forage and cover
- Uses topographic and species diversity
- · Found along habitat edges
- Indicator species of environmental "richness"



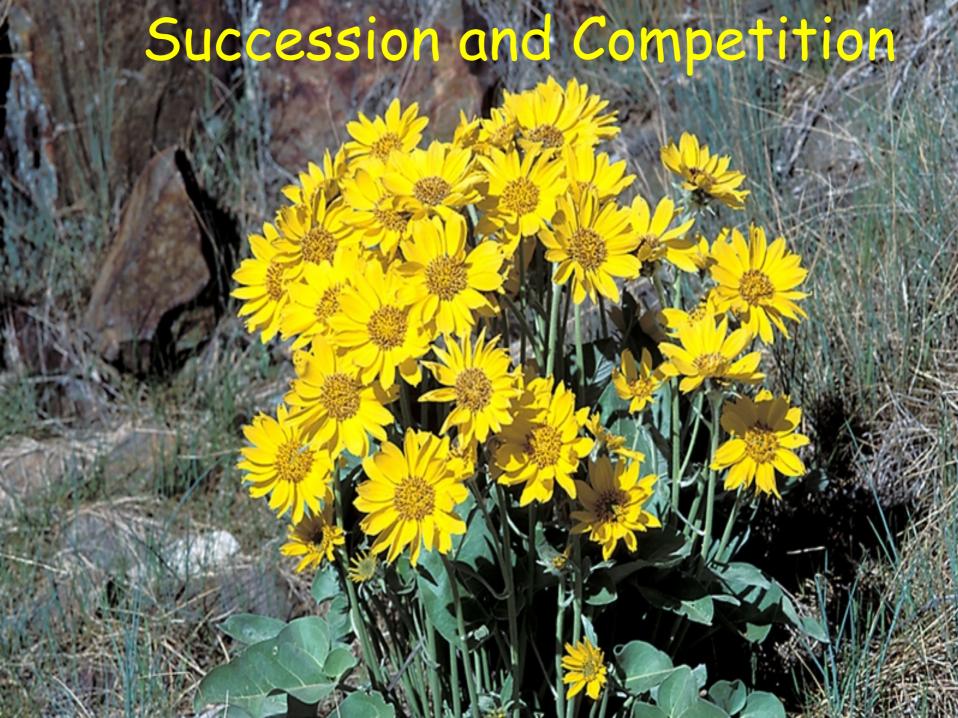


- Deep, rich-soils some of the most productive in the world
- Produce tons/acre
- · Hundreds of plant species
- Support huge numbers of wildlife and livestock
- · Highly productive agricultural crops



#### Dynamics (change) is due to:

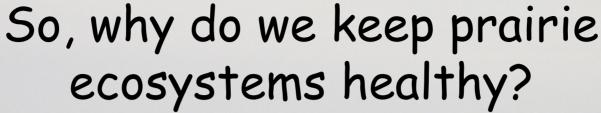
- Plant succession
- Competition
- Precipitation patterns
- · Fire
- Grazing by wildlife/livestock



### Precipitation patterns, fire











## Or, the last place you'd want to be?

